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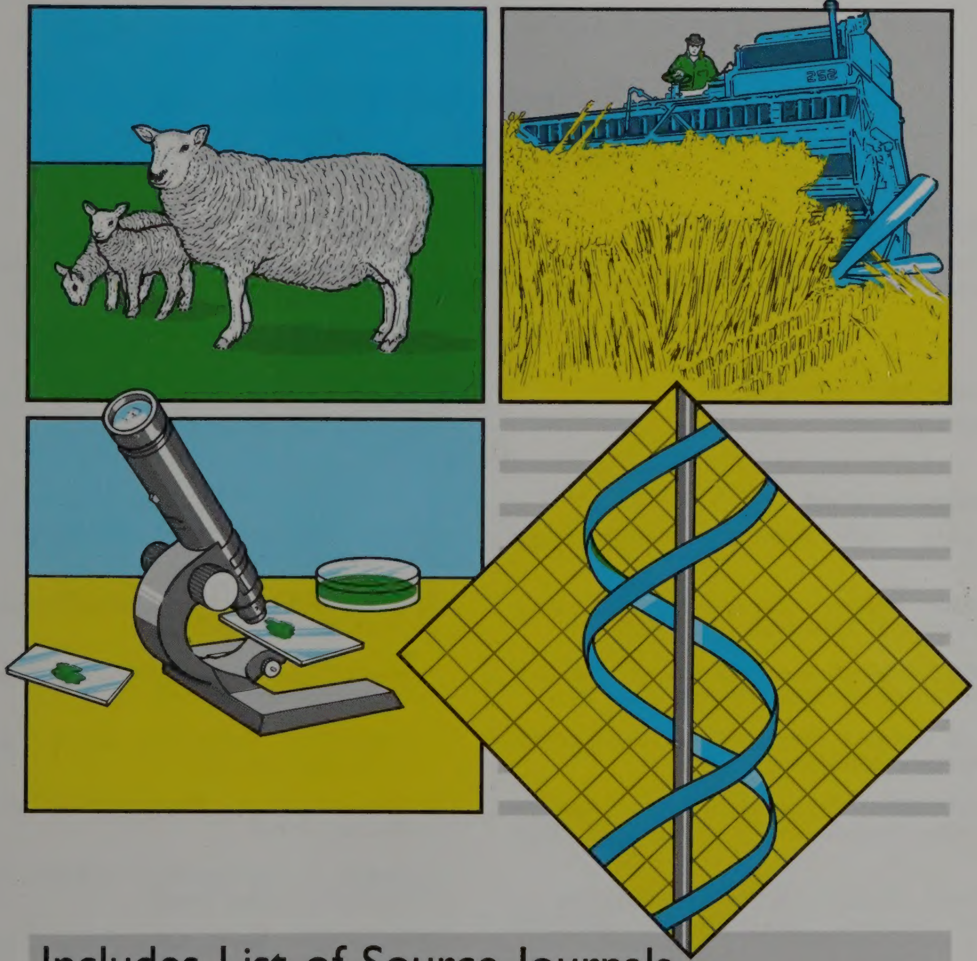

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1 → **4871** Prokopek, D.; Meisel, H.; Frister, H.; Krusch, U.;
Reuter, H.; Schlimme, E.; Teuber, M. [**Making Edam and** ← 3
Tilsit cheese using genetically engineered bovine chymosin from
Kluyveromyces lactis.] Herstellung von Edamer und Tilsiter ← 4
Käse mit gentechnologisch aus *Kluyveromyces lactis* gewonnemen Rinder-Chymosin. *Kieler Milchwirtschaftliche Forschungsberichte* ← 5
(1988) **40** (1) 43-52 [De, en, fr, 17 ref.] ← 6, 7
Bundesanstalt für Milchforschung, Kiel, German Federal Republic. ← 8
9 → Two commercial preparations of chymosin derived from *Kluyveromyces lactis* by genetic engineering were free from residual yeasts and were identical in biochemical tests to bovine chymosin, mainly as the B variant. One of the 2 preparations tended to give a shorter renneting time than calf rennet and both tended to give a firmer curd. There were, however, no significant differences in general composition or in ripeness in Edam and Tilsit cheeses between those made with calf rennet and those made with the genetically-derived chymosin.

For publications in languages, other than English, with a roman script, the original title is given in addition to the translated title.

For non-serial publications such as books, transliterated titles are given for languages in Cyrillic or Greek scripts.

Within subject sections, the abstracts are sequenced alphabetically by author(s).

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LANGUAGE ABBREVIATIONS

An initial capital denotes the language of the paper; an initial small letter, the language of the summary.

Af	Afrikaans
Al	Albanian
Ar	Arabic
Az	Azerbaijani
Be	Byelorussian (White Russian)
Bg	Bulgarian
Ch	Chinese
Cs	Czech
Da	Danish
De	German
Ee	Estonian
En	English
Eo	Esperanto
Es	Spanish
Fi	Finnish
Fr	French
Gr	Greek
He	Hebrew
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Hu	Hungarian
Ia	Interlingua
In	Indonesian
Is	Icelandic
It	Italian
Ja	Japanese
Ko	Korean
La	Latin
Li	Lithuanian
Lv	Latvian
Ma	Macedonian
My	Malay & Bahasa Malaysia
Nl	Dutch
No	Norwegian
Pe	Persian
Pl	Polish
Pt	Portuguese
Ro	Romanian
Ru	Russian
Sh	Serbo-Croat (either Latin or Cyrillic script)
Sk	Slovak
Sn	Slovene
Sv	Swedish
Ta	Tajik
Th	Thai
Tr	Turkish
Uk	Ukrainian

COMMONLY USED ABBREVIATIONS

a.i.	active ingredient
AAS	atomic absorption spectrometry
ADP	adenosine diphosphate
AI	artificial insemination
AMP	adenosine monophosphate
ASN	ammonium sulfate nitrate
ATP	adenosine triphosphate
bp	base pairs
BOD	biological oxygen demand
cAMP	cyclic adenosine monophosphate
CaMV	cauliflower mosaic caulimovirus
CAN	calcium ammonium nitrate
CAT	chloramphenicol acetyl transferase
CEC	cation exchange capacity
CMS	cytoplasmic male sterility
COD	chemical oxygen demand
CR	conception rate
ctDNA	chloroplast DNA
DM	dry matter
ELISA	enzyme-linked immunosorbent assay
ESP	exchangeable sodium percentage
FSH	follicle stimulating hormone
FYM	farmyard manure
GC/MS	gas chromatography/mass spectrometry
GLC	gas-liquid chromatography
GnRH	gonadotropin-releasing hormone
GUS	β-glucuronidase
Hb	haemoglobin
HCG	human chorionic gonadotropin
HPLC	high performance liquid chromatography
IBDU	isobutylidene diurea
Ig	immunoglobulin
kb	kilobases
LH	luteinizing hormone
ME	metabolizable energy
MHC	major histocompatibility complex
MS	Murashige & Skoog
mtDNA	mitochondrial DNA
MW	molecular weight
NAD	nicotinamide adenine dinucleotide
NADH	nicotinamide adenine dinucleotide (reduced form)
NADP	nicotinamide adenine dinucleotide phosphate
NADPH	nicotinamide adenine dinucleotide phosphate (reduced form)
NFT	nitrogen fixing tree/s (including shrubs)
NOS	nopaline synthase
NPT	neomycin phosphotransferase
OM	organic matter
PAGE	polyacrylamide gel electrophoresis
PCR	polymerase chain reaction
PEG	polyethylene glycol
PG	prostaglandin
PMC	pollen mother cell
PMS	pregnant mare serum
PMSG	pregnant mare serum gonadotropin
RFLP	restriction fragment length polymorphism
SAR	sodium adsorption ratio
SDS	sodium dodecyl sulfate
SSP	soluble sodium percentage
TLC	thin layer chromatography

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February 1990 Volume 2 No. 1

Due to a computer error, the heading "DISEASES AND PESTS" failed to appear on page 56 (above abstract No. 141) and consequently the starting page for this section was not given on the Contents page. However, the relevant abstracts (141–186) appeared correctly.

April 1990 Volume 2 No. 2

Page 295, abstract no. 1637, line 5 after "dikinase" insert "In *Molecular biology of photosynthesis [edited by Govindjee et al.]*. Dordrecht, Netherlands; Kluwer Academic Publishers (1989) 699–711 ISBN 0-7923-0097-1".

August 1990 Volume 2 No. 4

Due to an unfortunate error, the pages of this issue were numbered incorrectly such that they duplicate pages from the abstract section of the June issue (Part No. 3). Please quote part numbers in citations to avoid confusion.

October 1990 Volume 2 No. 5

On page 643, the author's name should read R.R. Mendel.

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Many other serials were scanned during 1990 but no relevant articles were selected. A full list of all the serials scanned for items suitable for abstracting for the CAB ABSTRACTS database and the whole range of CABI's abstract journals is given in the *CAB International Serials Checklist, 1988 edition.* The publication includes ISSNs and publishers' addresses.

Abstracts of Communicated Papers [Horticulture Abstracts], Korean Society for Horticultural Science
ACS Symposium Series
Acta Agriculturae Boreali-Sinica
Acta Agriculturae Nucleatae Sinica
Acta Agriculturae Universitatis Jilinensis
Acta Agriculturae Universitatis Pekinensis
Acta Agronomica Sinica
Acta Anatomica
Acta Biochimica et Biophysica Hungarica
Acta Biochimica et Biophysica Sinica
Acta Biologiae Experimentalis Sinica
Acta Botanica Neerlandica
Acta Botanica Sinica
Acta Entomologica Sinica
Acta Genetica Sinica
Acta Horticulturae
Acta Horticulturae Sinica
Acta Microbiologica Polonica
Acta Microbiologica Sinica
Acta Phytophysiologica Sinica
Acta Scientiarum Naturalium Universitatis Sunyatseni
Acta Veterinaria et Zootechnica Sinica
Acta Veterinaria Scandinavica
Acta Virologica
Advances in Applied Microbiology
Advances in Cell Culture
Advances in Disease Vector Research
Advances in Horticultural Science
Advances in Immunology
Advances in Veterinary Science and Comparative Medicine
Advances in Virus Research
AE Research, Department of Agricultural Economics, Cornell University
AFPC Policy Working Paper
AFRC News
AgBiotech News and Information
Agra Europe (British edition)
Agribusiness (New York)
Agribusiness Worldwide
Agricultural and Biological Chemistry
Agricultural Economic Report - Economic Research Service, US Department of Agriculture
Agricultural Economics
Agricultural Progress
Agricultural Science
Agriculture and Human Values
Agriculture Information Bulletin - United States Department of Agriculture
Agriculture, Ecosystems & Environment
Agronomie
Agronomie Tropicale
Állattenyésztés és Takarmányozás
American Bee Journal
American Biotechnology Laboratory
American Journal of Agricultural Economics
American Journal of Botany
American Journal of Pathology
American Journal of the Medical Sciences
American Journal of Tropical Medicine and Hygiene
American Journal of Veterinary Research
American Potato Journal
American Rhododendron Society Journal
American Zoologist
Anais da Sociedade Entomológica do Brasil
Analytica Chimica Acta
Analytical Biochemistry
Anatomy and Embryology
Animal Breeding Abstracts
Animal Feed Science and Technology
Animal Genetics
Animal Production
Animal Reproduction Science
Annales de Gembloux
Annales de l'Institut Pasteur, Immunology
Annales de l'Institut Pasteur, Virology
Annales de la Société Entomologique de France
Annales de Médecine Vétérinaire
Annali di Microbiologia ed Enzimologia
Annals of Applied Biology
Annals of Botany
Annals of the Entomological Society of America
Annals of the Missouri Botanical Garden
Annals of the New York Academy of Sciences
Annals of the Phytopathological Society of Japan
Annual Review of Cell Biology
Annual Review of Entomology
Annual Review of Genetics
Annual Review of Immunology
Annual Review of Microbiology
Annual Review of Phytopathology
Annual Review of Plant Physiology and Plant Molecular Biology
Antonie van Leeuwenhoek
Applied Agricultural Research
Applied and Environmental Microbiology
Applied Biochemistry and Biotechnology
Applied Engineering in Agriculture
Applied Entomology and Zoology
Applied Microbiology and Biotechnology
Aquaculture
Arab Journal of Plant Protection
Archiv für Experimentelle Veterinärmedizin
Archiv für Phytopathologie und Pflanzenschutz
Archiv für Tierzucht
Archiv für Züchtungsforschung
Archives Internationales de Physiologie et de Biochimie
Archives of Biochemistry and Biophysics
Archives of Insect Biochemistry and Physiology
Archives of Microbiology
Archives of Virology
Arzneimittelforschung
ASM News (Washington)
Asparagus Research Newsletter
Aspects of Applied Biology
Assiut Journal of Agricultural Sciences
ATAC, Revista de la Asociación de Técnicos Azucareros de Cuba
Australian Journal of Agricultural Research
Australian Journal of Biological Sciences
Australian Journal of Biotechnology
Australian Journal of Botany
Australian Journal of Plant Physiology
Australian Veterinary Journal
Avian Diseases
Avian Pathology
Bacterial Wilt Newsletter, ACIAR
Barley Genetics Newsletter
Bayerisches Landwirtschaftliches Jahrbuch
Behavior Genetics
Beretning - Hedeselskabets Forskningsvirksomhed
Berichte über Landwirtschaft
Berliner und Münchener Tierärztliche Wochenschrift
Bharatiya Sugar
Bio/Technology
Biochemical and Biophysical Research Communications
Biochemical Genetics
Biochemical Journal (London)
Biochemical Society Transactions
Biochemical Systematics and Ecology
Biochemie und Physiologie der Pflanzen
Biochemistry
Biochemistry and Cell Biology
Biochimica et Biophysica Acta (M), Biomembranes
Biochimica et Biophysica Acta (N), Gene Structure and Expression
Biochimica et Biophysica Acta (P), Protein Structure and Molecular Enzymology
Biochimie

BioEssays
Biofutur
Biokhimiya
Biológia (Bratislava)
Biological Chemistry Hoppe-Seyler
Biological Wastes
Biologicals
Biologisches Zentralblatt
Biology and Fertility of Soils
Biology Bulletin of the Academy of Sciences of the USSR
Biology of Metals
Biology of Reproduction
Biology of the Cell
Biološki Vestnik
Biomass
Biometrics
Bioorganicheskaya Khimiya
Biopolimery i Kletka
BioScience
Bioscience Reports
BioTechniques
Biotechnology & Genetic Engineering Reviews
Biotechnology Advances
Biotechnology and Bioengineering
Biotechnology Letters
Biovigyanam
Blätter des IZDW
Bloembollencultuur
Blood
BNA Special Report Series on Biotechnology
Botanica Acta
Botanica Helvetica
Botanical Bulletin of Academia Sinica
Botanical Journal of the Linnean Society
Botanical Magazine, Tokyo
Botanicheskiĭ Zhurnal
Brazilian Journal of Medical and Biological Research
British Sugar Beet Review
Buffalo Bulletin
Buffalo Journal
Buletin VÚRH Vodňany
Bulletin - Alabama Agricultural Experiment Station
Bulletin de la Société Royale de Botanique de Belgique
Bulletin des Recherches Agronomiques de Gembloux
Bulletin OEPP
Bulletin of Environmental Contamination and Toxicology
Bulletin of Mathematical Biology
Bulletin of the Akita Prefectural College of Agriculture
Bulletin of the College of Agriculture, Utsunomiya University
Bulletin of the Faculty of Agriculture, Hirosaki University
Bulletin of the Faculty of Agriculture, Niigata University
Bulletin of the Faculty of Agriculture, Saga University
Bulletin of the Faculty of Agriculture, Tokyo University of Agriculture and Technology (Tokyo Noko Daigaku)
Bulletin of the Faculty of Agriculture, Tottori University
Bulletin of the Fruit Tree Research Station, Series B, Okitsu
Bulletin of the Hokuriku National Agricultural Experiment Station
Bulletin of the Nara Agricultural Experiment Station
Bulletin of the National Institute of Agrobiological Resources, Japan
Bulletin of the National Institute of Animal Health, Japan
Buskap og Avdrått
Canadian Journal of Agricultural Economics
Canadian Journal of Animal Science
Canadian Journal of Botany
Canadian Journal of Fisheries and Aquatic Sciences
Canadian Journal of Microbiology
Canadian Journal of Plant Pathology
Canadian Journal of Plant Science
Canadian Journal of Veterinary Research
Canadian Journal of Zoology
Canadian Veterinary Journal
Carbohydrate Research
Carlsberg Research Communications
Caryologia
Cell (Cambridge)
Cell and Tissue Research
Cell Biology International Reports
Cell Structure and Function
Cercetări de Genetică Vegetală şi Animală
Cereal Chemistry
Cereal Research Communications
Chambres d'Agriculture
Chemistry & Industry
Chinese Journal of Biological Control
Chinese Journal of Biotechnology
Chinese Journal of Entomology
Chinese Journal of Parasitic Disease Control
Chinese Journal of Veterinary Medicine
Chinese Journal of Veterinary Science and Technology
Chinese Journal of Virology
Chinese Medical Journal
Chromosoma
Ciencia y Técnica en la Agricultura, Mecanización de la Agricultura
Circular, Alabama Agricultural Experiment Station, Auburn University
Civil Engineering (New York)
Clinical Chemistry
Clinics in Laboratory Medicine
Colloids and Surfaces
Colture Protette
Companion Animal Practice
Comparative Biochemistry and Physiology. A, Comparative Physiology
Comparative Biochemistry and Physiology. B, Comparative Biochemistry
Comparative Pathology Bulletin
Comptes Rendus de l'Académie Bulgare des Sciences
Comptes Rendus de l'Académie des Sciences. Series 3, Sciences de la Vie
Comptes Rendus des Séances de la Société de Biologie et de ses Filiales
Critical Reviews in Biotechnology
Critical Reviews in Immunology
Critical Reviews in Plant Sciences
Crop Science
Cryo-Letters
Cryobiology
Cultured Dairy Products Journal
Current Genetics
Current Microbiology
Current Science
Current Topics in Microbiology and Immunology
Cytobios
Cytogenetics and Cell Genetics
Cytologia
Czechoslovak Heavy Industry
Dairy Industries International
Dansk Veterinærtidsskrift
Deltion tes Ellēnikēs Ktēniatrikēs Etaireias = Bulletin of the Hellenic Veterinary Medical Society
Deutsche Pelztierzüchter
Development (Cambridge)
Developmental Biology
Developmental Genetics
Developments in Biological Standardization
Diagnostic Microbiology and Infectious Disease
Diseases of Aquatic Organisms
Dissertation Abstracts International. A, Humanities and Social Sciences
Dissertation Abstracts International. B, Sciences and Engineering
Divisional Note - AFRC Institute of Engineering Research
DLG-Mitteilungen
DNA (New York)
DNA and Cell Biology
Doklady Akademii Nauk BSSR
Doklady Biochemistry
Doklady Vsesoyuznoĭ Akademii Sel'skokhozyaĭstvennykh Nauk
Doklady Vsesoyuznoĭ Ordena Lenina i Ordena Trudovogo Krasnogo Znameni Akademii Sel'skokhozyaĭstvennykh Nauk im. V. I. Lenina
Doklady, Biochemistry
Domestic Animal Endocrinology
Ecologist
Economie Rurale
Effem-Forschung für Heimtiernahrung
Egyptian Journal of Botany
Egyptian Journal of Phytopathology
Electrophoresis
EMBO Journal
Endocrinology (Philadelphia)
Entomologia Experimentalis et Applicata
Entomologist
Entomophaga
Entwicklung + Ländlicher Raum
Environmental and Experimental Botany
Environmental Entomology
Environmental Pollution
Environmental Toxicology and Chemistry
Enzyme and Microbial Technology
Epitheōrēsē zōotehnikēs Epistēmēs
Erwerbsobstbau
Euphytica
European Journal of Biochemistry
European Journal of Cell Biology
European Journal of Forest Pathology
European Journal of Immunology
European Journal of Obstetrics & Gynecology and Reproductive Biology
European Parliament Document Series A
European Parliament Working Documents
European Patent
European Patent Application

Evolution
Evolutionary Trends in Plants
Excerpta Medica International Congress Series
Experientia
Experimental & Applied Acarology
Experimental Animals
Experimental Cell Research
Experimental Mycology
Experimental Parasitology
Extension Bulletin - ASPAC, Food and Fertilizer Technology Center
FABIS Newsletter
FAO Agriculture Series
FAO Animal Production and Health Paper
Farm and Food Research
Farm Buildings and Engineering
Farm Management
FAT-Berichte, Switzerland
FEBS Letters
Feedstuffs
FEMS Microbiology Ecology
FEMS Microbiology Immunology
FEMS Microbiology Letters
Fertility and Sterility
Fertilizer International
Fish Farmer
Fish Pathology
Fitopatologia Brasileira
Fitoterapia
Fiziologiya na Rasteniyata
Fiziologiya Rasteniĭ
Food and Agricultural Immunology
Food Policy
Food Technology (Chicago)
Forage Notes
Förderungsdienst
Forest Ecology and Management
French Patent Application
Fruit Varieties Journal
Fujian Agricultural Science and Technology
Fundamental and Applied Toxicology
Gamete Research
Gas- und Wasserfach, Wasser, Abwasser
Gb + Gw, Gärtnerbörse und Gartenwelt
Gene
Gene Analysis Techniques
Genes & Development
Genetic Manipulation in Crops Newsletter
Genetica
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Genetical Research
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Genetics, Selection, Evolution
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HortScience
Human Genetics
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Immunology Letters
Immunology Today
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Indian Dairyman
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Indian Journal of Animal Sciences
Indian Journal of Experimental Biology
Indian Journal of Medical Research
Indian Journal of Microbiology
Indian Journal of Pharmaceutical Sciences
Industries Alimentaires et Agricoles
Infection and Immunity
Information Bulletin - Citrus and Subtropical Fruit Research Institute
Informations Techniques du CEMAGREF
Informatore Fitopatologico
INRA Sciences Sociales
Insect Biochemistry
Intellectual Property in Business
Interciencia
International Archives of Allergy and Applied Immunology
International Chickpea Newsletter
International Industrial Biotechnology
International Journal for Parasitology
International Journal of Animal Sciences
International Journal of Invertebrate Reproduction and Development
International Journal of Refrigeration
International Journal of Systematic Bacteriology
International Journal of Tropical Plant Diseases
International Labour Review
International Review of Cytology
International Rice Research Newsletter
Internationale Agrarindustrie Zeitschrift
Intervirology
Investigación Agraria, Economía
ISI Atlas of Science, Animal and Plant Sciences
ISNAR Training Series
Italia Agricola
ITEA, Información Técnica Económica Agraria
Izvestiya Akademii Nauk Kazakhskoĭ SSR. Seriya Biologicheskaya
Izvestiya Sibirskogo Otdeleniya Akademii Nauk SSR. Seriya Biologicheskikh Nauk
Japanese Journal of Animal Reproduction
Japanese Journal of Applied Entomology and Zoology
Japanese Journal of Breeding
Japanese Journal of Crop Science
Japanese Journal of Fertility and Sterility
Japanese Journal of Genetics
Japanese Journal of Veterinary Research
Japanese Journal of Veterinary Science
Japanese Journal of Zootechnical Science
JARQ, Japan Agricultural Research Quarterly
Jiangsu Journal of Agricultural Sciences
Journal - Association of Official Analytical Chemists
Journal of Agricultural and Food Chemistry
Journal of Agricultural Engineering Research
Journal of Agricultural Ethics
Journal of Agricultural Research of China
Journal of Agricultural Science, Tokyo Nogyo Daigaku
Journal of Agronomy and Crop Science
Journal of Animal Breeding and Genetics
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Journal of Applied Bacteriology
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Journal of Clinical Microbiology
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Journal of General Microbiology
Journal of General Virology
Journal of Genetics & Breeding
Journal of Helminthology
Journal of Heredity
Journal of Histochemistry and Cytochemistry

Journal of Horticultural Science
Journal of Immunoassay
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Journal of Molluscan Studies
Journal of Natural Products
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Journal of Nuclear Agriculture and Biology
Journal of Nutrition
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Journal of Phytopathology
Journal of Plant Growth Regulation
Journal of Plant Nutrition
Journal of Plant Physiology
Journal of Plantation Crops
Journal of Production Agriculture
Journal of Protozoology
Journal of Reproduction and Fertility
Journal of Science of the Hiroshima University. Series B, Division 2, Botany
Journal of Scientific & Industrial Research
Journal of Stored Products Research
Journal of Sugar Beet Research
Journal of Taiwan Livestock Research
Journal of the American Mosquito Control Association
Journal of the American Oil Chemists' Society
Journal of the American Society for Horticultural Science
Journal of the Australian Entomological Society
Journal of the Chinese Society of Veterinary Science
Journal of the Faculty of Agriculture, Hokkaido University
Journal of the Institution of Water and Environmental Management
Journal of the Iowa Academy of Science
Journal of the Japan Veterinary Medical Association
Journal of the Korean Society for Horticultural Science
Journal of the Lepidopterists' Society
Journal of the Maharashtra Agricultural Universities
Journal of the Science of Food and Agriculture
Journal of the Sports Turf Research Institute
Journal of the University of Kuwait, Science
Journal of Theoretical Biology
Journal of Ultrastructure and Molecular Structure Research
Journal of Veterinary Medicine. Series B
Journal of Virological Methods
Journal of Virology
Journal of Zoo Animal Medicine
Journal of Zoology
Journées de la Recherche Porcine en France
Jugoslovensko Voćarstvo
KB-Mitteilungen
Khlopok
Korean Journal of Animal Sciences
Korean Journal of Crop Science
Korean Journal of Dairy Science
Kukuruza i Sorgo
Laboratornoe Delo
Laboratory Practice
Landbauforschung Völkenrode
Landtechnik
Landwirtschaft Schweiz
Lebensmittel-Wissenschaft & Technologie
Letters in Applied Microbiology
Livestock Production Science
Lohmann Information
Mælkeritidende
Magyar Allatorvosok Lapja
Maize Genetics Cooperation News Letter
Mastitis Newsletter
Maydica
Mechanizace Zemědělství
Meddelande - Svensk Husdjursskötsel
Meddelelse - Jordbrugsteknisk Institut
Mededelingen van de Faculteit Landbouwwetenschappen, Rijksuniversiteit Gent
Medicina Veterinaria
Medycyna Weterynaryjna
Meieriposten
Memoirs of the Faculty of Agriculture, Hokkaido University
Memoirs of the Faculty of Agriculture, Kagoshima University
Methods in Microbiology
Micologia Neotropical Aplicada
Microbial Pathogenesis
Microbiological Reviews
Microbiology and Immunology
Microbiology, China
Microbios Letters
Mikologiya i Fitopatologiya
Mikrobiologicheskiĭ Zhurnal
MIRCEN Journal of Applied Microbiology and Biotechnology
Mitteilungen aus der Biologischen Bundesanstalt für Land- und Forstwirtschaft Berlin-Dahlem
Mitteilungen der Deutschen Gesellschaft für Allgemeine und Angewandte Entomologie
Molecular and Biochemical Parasitology
Molecular and Cellular Biology
Molecular and General Genetics
Molecular Biology (New York)
Molecular Biology and Evolution
Molecular Endocrinology (Baltimore)
Molecular Immunology
Molecular Microbiology
Molecular Plant-Microbe Interactions
Molecular Reproduction and Development
Molekulyarnaya Biologiya
Molekulyarnaya Genetika, Mikrobiologiya i Virusologiya
Molkereitechnik
Monatshefte für Veterinärmedizin
Monograph - British Crop Protection Council
Monograph - British Plant Growth Regulator Group
Moscow University Biological Sciences Bulletin
Mouse Genome
Mutation Research, DNA Repair
Mutation Research, Fundamental and Molecular Mechanisms of Mutagenesis
Mutation Research, Mutation Research Letters
Mycologia
Mycological Research
Mycopathologia
Mycotoxin Research
Nachrichtenblatt des Deutschen Pflanzenschutzdienstes
Nachrichtenblatt für den Pflanzenschutz in der DDR
National Food Review
Nature (London)
Naturwissenschaften
Nauchno-Tekhnicheskiĭ Byulleten' Vsesoyuznogo Ordena Lenina i Ordena Druzhby Narodov Nauchno-Issledovatel'skogo Instituta Rastenievodstva Imeni N. I. Vavilova
Nauchnye Doklady Vyssheĭ Shkoly, Biologicheskie Nauki
Nauchnye Osnovy Razvitiya Zhivotnovodstva v BSSR
NBRI Newsletter
Nematologica
Netherlands Journal of Plant Pathology
Netherlands Milk and Dairy Journal
Neuroendocrinology
New Forests
New Phytologist
New Scientist
New Zealand Journal of Agricultural Research
New Zealand Veterinary Journal
Newsletter - International Plant Biotechnology Network
Ningxia Journal of Agro-Forestry Science and Technology
Nippon Nogeikagaku Kaishi
Nippon Sochi Gakkaishi = Journal of Japanese Society of Grassland Science
Nippon Suisan Gakkaishi = Bulletin of the Japanese Society of Scientific Fisheries
Nogaku Kenkyu
Nordic Journal of Botany
Norsk Pelsdyrblad
Norsk Veterinærtidsskrift
North Central Journal of Agricultural Economics
Norwegian Journal of Agricultural Sciences
Nucleic Acids Research
Nucleus (Calcutta)
Obiettivi e Documenti Veterinari
Oil Crops of China
Onderstepoort Journal of Veterinary Research
Opera Botanica
Osnabrücker Schwarzbuntzucht
Oxford Surveys of Plant Molecular and Cell Biology
Oxford Surveys on Eukaryotic Genes
Pakistan Journal of Botany
Pakistan Journal of Scientific and Industrial Research
Paper - American Society of Agricultural Engineers
Parasite Immunology
Parasitology
Parasitology Research
Parasitology Today
PCT International Patent Application
Pertanika
Pesticide Biochemistry and Physiology

Pesticide Science
Pflanzenschutzberichte
Pharmacology and Therapeutics
Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences.
Photosynthesis Research
Physiologia Plantarum
Physiological and Molecular Plant Pathology
Phytochemistry
Phyton (Buenos Aires)
Phytoparasitica
Phytopathologia Mediterranea
Phytopathology
Phytoprotection
Pig News and Information
Pig Veterinary Journal
Pineal Research Reviews
Plant and Cell Physiology
Plant and Soil
Plant Breeding
Plant Breeding Reviews
Plant Cell
Plant Cell Incompatibility Newsletter
Plant Cell Reports
Plant Cell, Tissue and Organ Culture
Plant Disease
Plant Genetic Resources Newsletter
Plant Molecular Biology
Plant Pathology
Plant Physiology
Plant Physiology and Biochemistry (Paris)
Plant Protection Bulletin, Taiwan
Plant Science (Limerick)
Plant Systematics and Evolution
Plant Varieties & Seeds
Plant, Cell and Environment
Planta
Planta Medica
Plantsman
Plasmid
Pluimvee Bulletin
Point Vétérinaire
Pol'nohospodárstvo
Pomme de Terre Française
Potato Research
Poultry Science
Praktische Tierarzt
Pratique Vétérinaire Équine
Proceedings - Soil and Crop Science Society of Florida
Proceedings of Faculty of Agriculture, Kyushu Tokai University
Proceedings of the Association for Plant Protection of Kyushu
Proceedings of the Indian National Science Academy. Part B, Biological Sciences
Proceedings of the Japanese Association of Mycotoxicology
Proceedings of the Japanese Society of Sugar Beet Technologists
Proceedings of the National Academy of Sciences of the United States of America
Proceedings of the National Science Council. Republic of China. Part B, Life Sciences
Proceedings of the New Zealand Society of Animal Production
Proceedings of the Western Poultry Disease Conference
Process Biochemistry
Productions Animales
Proefverslag - Proefstation voor de Varkenshouderij
Progress and Topics in Cytogenetics
Progress in Botany
Progress in Clinical and Biological Research
Progress in Leukocyte Biology
Progress in Nucleic Acid Research and Molecular Biology
Progress in Veterinary Microbiology and Immunology
Prophyta
Protoplasma
Publications de la CEA, Confédération Européenne de l'Agriculture, Switzerland
Quarterly Newsletter - Tea Research Foundation of Central Africa
Quarterly Review of Biology
RAFI Communique
Rapport - Statens Jordbrugsøkonomiske Institut
Rastitel'nye Resursy
Recueil de Médecine Vétérinaire
Report - Cucurbit Genetics Cooperative
Reproduction, Fertility and Development
Reproduction, Nutrition, Development
Research Bulletin of the Faculty of Agriculture, Gifu University
Research Bulletin of the Plant Protection Service
Research in Microbiology
Research in Veterinary Science
Research in Virology
Research Report - Georgia Agricultural Experiment Stations
Research Reports of the Rural Development Administration, Biotechnology
Research Reports of the Rural Development Administration, Soil & Fertilizer
Research Reports of the Rural Development Administration, Veterinary
Resource Management and Optimization
Reviews in Aquatic Sciences
Revista Brasileira de Genética
Revista Cubana de Ciencias Veterinarias
Revista de Microbiologia
Revista ICIDCA Sobre Los Derivados de la Caña de Azúcar
Revue de Médecine Vétérinaire
Revue de Nématologie
Revue Roumaine de Biologie, Biologie Végétale
Revue Scientifique et Technique - Office International des Épizooties
Rivista di Ingegneria Agraria
Roczniki Nauk Rolniczych, C (Technika Rolnicza)
Rostlinná Výroba
Rural Research
Rural Sociologist
Rural Sociology
Sborník ÚVTIZ, Genetika a Šlechtění
Scandinavian Journal of Infectious Diseases
Science (Washington)
Science and Public Affairs
Science in China. Series B, Chemistry, Life Sciences & Earth Sciences
Science Progress
Scientia Agricultura Sinica
Scientia Agriculturae Bohemoslovaca
Scientia Horticulturae
Scientific American
Scientific Reports of the Kyoto Prefectural University, Agriculture
Seed Science and Technology
Sel'skokhozyaĭstvennaya Biologiya
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Selskostopanska Nauka
Sheep Dairy News
Sibirskiĭ Vestnik Sel'skokhozyaĭstvennoĭ Nauki
Silvae Genetica
Singapore Journal of Primary Industries
Small Ruminant Research
Society for Experimental Biology Seminar Series
Soil Biology & Biochemistry
Soil Science
Soil Science Society of America Journal
Soils (Turang)
Somatic Cell and Molecular Genetics
Soobshcheniya Akademii Nauk Gruzinskoĭ SSR
South African Journal of Animal Science
South African Journal of Science
Southeast Asian Journal of Tropical Medicine and Public Health
Southern Cooperative Series Bulletin
Soviet Agricultural Sciences
Soviet Biotechnology
Special Report - Economist Intelligence Unit
Staff Paper - Department of Agricultural and Applied Economics, University of Minnesota
Stain Technology
Sugar Cane
Summa
Suomen Eläinlääkärilehti
Svensk Veterinärtidning
Svinovodstvo, Moscow
Systematic and Applied Microbiology
Systematic Botany
Techni-Porc
Technical Bulletin - ASPAC, Food and Fertilizer Technology Center
Technique Agricole
Tecnica Agricola
Tekhnika v Sel'skom Khozyaĭstve
Thai Journal of Veterinary Medicine
Theoretical and Applied Genetics
Theriogenology
Therios
Tierärztliche Umschau
Tierhygiene-Information, Eberswalde-Finow
Tierzucht
Tierzüchter
Tijdschrift voor Diergeneeskunde
Tijdschrift voor Entomologie
Toxicology and Applied Pharmacology
Transactions of the ASAE
Transactions of the Royal Society of Tropical Medicine and Hygiene
Translation - AFRC Institute of Engineering Research
Transplantation Proceedings
Trends in Biochemical Sciences
Trends in Biotechnology
Trends in Ecology & Evolution
Trends in Genetics
Tropical Agriculture
Tropical Agriculturist

Tsitologiya i Genetika
Turrialba
UCLA Symposia on Molecular and Cellular Biology, New Series
Ugeskrift for Jordbrug
United States Patent
USSR Patent
Vaccine
Vestnik Sel'skokhozyaĭstvennoĭ Nauki (Moskva)
Veterinaria Argentina
Veterinaria México
Veterinarna Sbirka
Veterinární Medicína
Veterinářství
Veterinary and Human Toxicology
Veterinary Annual
Veterinary Immunology and Immunopathology
Veterinary Medicine Report
Veterinary Microbiology
Veterinary Parasitology
Veterinary Quarterly
Veterinary Radiology
Veterinary Record
Veterinary Research Communications
Vignevini
Viral Immunology
Virology (New York)
Virus Research
Voedingsmiddelen Technologie
Vorträge für Pflanzenzüchtung
Výzkum v Chovu Skotu
Wallaceana
Water, Air, and Soil Pollution
Weed Research (Oxford)
Weed Science
Wei Sheng Wu Hsueh Pao
Wheat Information Service, Japan
Wiener Tierärztliche Monatsschrift
Wieś Współczesna
Wissenschaftliche Zeitschrift - Karl-Marx-Universität Leipzig, Mathematisch-Naturwissenschaftliche Reihe
Wool Technology and Sheep Breeding
Working Paper - World Employment Programme Research, International Labour Office
World's Poultry Science Journal
Zeitschrift für Naturforschung. Section C, Biosciences
Zeitschrift für Pflanzenkrankheiten und Pflanzenschutz
Zentralblatt für Bakteriologie
Zentralblatt für Mikrobiologie
Zhivotnov'dni Nauki
Zhongguo Shiyongjun = Edible Fungi of China
Živočišná Výroba
Zuchthygiene
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Economics, Development and Sociology
Leisure, Recreation & Tourism Abstracts; Rural Development Abstracts; World Agricultural Economics & Rural Sociology Abstracts.

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Human Nutrition
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The Organization
CAB International (CABI) is an international, intergovernmental organization registered with the United Nations. It is owned and administered by its member governments; these currently number 29, but membership is open to all governments who wish to participate. Established in 1928, the organization provides information, scientific, and development services for agriculture and allied disciplines throughout the world.

Information Services
The main task of the Information Services, located at the CAB International Centre (CABIC) at Wallingford, is the creation of a bibliographic database of research on agriculture, forestry and allied disciplines, including social sciences and aspects of human medicine. Abstract journals derived from the database, and online access to it, provide a unique source of information for research scientists, development planners, educators and students. Subsidiary but growing tasks are the publication of primary journals and reference works, and training information professionals in developing countries.

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Animal Health
Dairy Science & Technology
Nutrition
Pastures & Field Crops
Crop Protection
Horticulture & Plantation Crops
Plant Breeding & Genetics
Soils
Forestry

Further material is acquired and processed by collaborating or contracted organizations. Other staff coordinate work on specialized directories and databanks, and commission new books and primary journals. The Publications Unit is responsible for printing the journals and books, and the Marketing & Sales Division promotes and sells Information Services products and services world-wide (see inside back cover for details).

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CAB International Institute of Entomology (CIE), Director Dr K.M. Harris, located at 56 Queen's Gate, London, and in the British Museum, Natural History.

CAB International Mycological Institute (CMI). Director Professor D.L. Hawksworth, located at Ferry Lane, Kew, London, adjacent to the Royal Botanic Gardens.

CAB International Institute of Parasitology (CIP), Director Dr R. Muller, located at Winches Farm, St Albans, the field station of the London School of Hygiene & Tropical Medicine.

These three Institutes provide an authoritative identification service for agricultural pests and other organisms, conduct research, implement projects, and provide training in their fields of expertise.

CAB International Institute of Biological Control (CIBC), Director Dr D.J. Greathead, has its headquarters at Silwood Park, Ascot, the field station of Imperial College of Science and Technology, University of London. It has stations in Trinidad and Tobago, Switzerland, Pakistan, Kenya and Malaysia. It provides biocontrol services, conducts training, and participates in integrated pest management programmes.

Development Services, (CDS), Head Mr D. Heydon, integrate the broad range of CABI expertise to provide advice and assistance with agricultural problems, but particularly those related to pest management and information services.

Library Services, Manager Mr C.J. Hamilton, have their headquarters with CIBC at Silwood Park, where the main Library is held, with additional literature collections at CMI, CIP, CDS and CABIC. Library Services operate a Document Delivery Service.

Systems
The Systems Division provides computing resources and services to all parts of CABI. It maintains a central computing facility with telecommunications access to seven remote sites, including four CABI Institutes. CABIC is served by a modern Local Area Network which provides access to the computers, and by advanced office automation facilties. The main computers are DEC VAX systems and the principal software systems are BASIS for data management and information retrieval and PAGER for typesetting.

The staff of 20 includes database production personnel, systems analysts, programmers and computer operators. The principal systems are for the production of the CABI bibliographic database and associated functions, plus accessions control, subscription management and electronic publishing.

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